91-068292/13 A60 E23 F06 (E21) PARK 16.09.89
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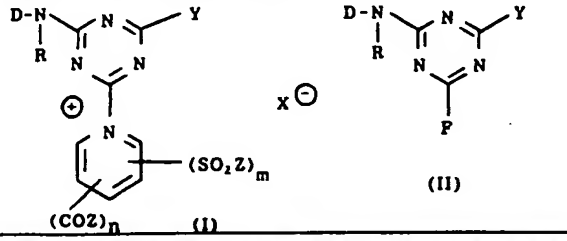
Reactive dyestuff prodn. by introducing cationic pyridino gp - into s=triazinyl-amino dyestuff cpd. for dyeing and printing e.g. cotton and polyamide

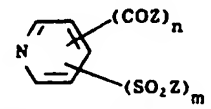
C91-037486 R(CH DE FR GB LI)

A(3-A5, 5-F1D, 8-E3, 12-S5H) E(21-D1, 21-D8, 25) F(3-F3, 3-F6, 3-F19, 3-F22)

Prodn. of reactive dyestuffs of formula (I) having a cationic 4-pyridino-s-triazin-2-yl-amino substit. involves reacting a 4-fluoro-s-triazin-2-yl-amino-substd. dyestuff of formula (II) with a pyridine cpd. of formula (III) in the presence of an acid-binding agent (IV).



(I) (II)



(III)

D = the radical of inorganic chromophore;
R = H or 1-4C alkyl;
n and m = 0, 1 or 2 with m + n = max. 2;
Y = a substit. which is not fibre-reactive;
Z = OH, OR_1, NR_2R_3 or OM;
M = an alkali(ne earth) metal, esp. Li, Na or K;
X^- = the anion of a mono- or polybasic (in)org. acid;
R^1 = opt. substd. 1-4C alkyl;
R_2 and R_3 = H or R_1; or NR_2R_3 = a 5- or 6-membered heterocycle.

USE/ADVANTAGE

(I) are useful for dyeing and printing natural and synthetic materials contg. OH or amide gps., esp. cellulose and polyamides. They are esp. suitable for dyeing

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cellulose materials by the exhaustion and slop padding cold dwell technique and for printing cotton and staple rayon. Good build-up, high fixing yields and good fastness, esp. wet fastness, are obtd.

ALSO CLAIMED

The claims also cover aq. solns. with pH 4-9, pref. 6-8, contg. 2-50 esp. 5-30 (wt.)% (I), 0-1, pref. 0-0.5% inorg. neutral salt, 0-40% water-miscible org. solvent (V) and opt. other conventional additives (VI), e.g. buffers.

PREFERRED CONDITIONS

Reaction is carried out in aq. or aq.-org. medium at 40-140, pref. 80-90°C and pH 4-10, pref. 6-8. The aq. (I) solns. are prepd. by reacting (II), opt. in the form of aq. solns. or dispersions obtd. by coupling or condensation, with (III) in aq. or aq.-org. medium, followed by pressure permeation. (V) and opt. (VI) may be added before, during or after permeation.

EXAMPLE

71.8 g 2-(3-(3-carboxy-5-hydroxy-1-(4-sulphophenyl)-pyrazol-4-yl-azo)-4-sulpho-anilino)-6-(N-methyl-6-sulpho-ethylamino)-4-fluoro-s-triazine stirred in 250 ml water, adjusted to pH 7.5 with soda soln., treated with 12.9 g nicotinic acid and reacted at 80-85°C and pH 7.5, giving 350 ml dyestuff soln. This was desalinated and conc. by pressure permeation, using a synthetic polymer membrane with a cut-off level of 1000. 180 g conc. dyestuff soln. were obtd. The soln. was treated with 2 g NaH_2PO_4, 2g Na_2HPO_4 and 6 g ε-caprolactam and made up to 200 ml with deionised water.(18pp016MBDwgNo0/0).

(G) ISR: DE2634308 J61040367

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